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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,183	01/12/2001	Yoichiro Igarashi	FUJR 18.213	9980
26304 7590 03/12/2007 KATTEN MUCHIN ROSENMAN LLP 575 MADISON AVENUE NEW YORK, NY 10022-2585			EXAMINER LAZARO, DAVID R	
			ART UNIT 2155	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

4.5

Office Action Summary	Application No. 09/759,183	Applicant(s) IGARASHI ET AL.	
	Examiner David Lazaro	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-14 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-14 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the RCE filed 02/09/2007.
2. Claims 1 and 18 were amended.
3. Claims 5, 15-17 and 19 are canceled.
4. Claims 1-4, 6-14 and 18 are pending in this office action.

Response to Amendment and Arguments

5. Applicant's arguments with respect to claims 1 and 18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4 and 6-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,038,445 by Alperovich et al. (Alperovich) in view of U.S. Patent 6,480,715 by Pentikainen (Pentikainen) and "Route Optimization in Mobile IP" Internet Draft by Perkins et al. (Perkins).
8. With respect to Claim 1, Alperovich teaches a network system comprising:

(a) a home agent, coupled to the peer terminal, which maintains the location of the user terminal and tunnels packets for delivery to the user terminal (column 3, lines 35-39; column 3, lines 45-54).,

(b) a foreign agent which detunnels and delivers the packets to the user terminal that is visiting a foreign network (column 3, lines 45-54, visiting mobile switching center);

(c) a service control database which maintains a customizable service profile defining what class of service to provide to the user terminal (column 3, lines 35-39; column 4, lines 14-33, HLR);

(d) a home server located in a first administrative domain to which the user terminal belongs (column 3, lines 35-39,* column 3, lines 45-54, home PLMN; column 4, lines 14- 33, HLR), comprising:

service profile setting means for retrieving the service profile from said service control database when the user terminal initiates a communication session (column 7, lines 36- 67), and distributing and setting the retrieved service profile to said foreign agent as an initial service profile, the service profile variably specifying services that the user terminal requires depending on control conditions (Col. 7 line 13 - Col. 8 line 19, also note Fig. 7), and

service profile updating means for generating an event signal when one of the control conditions described in the retrieved service profile is met, obtaining a new service profile from said service control database in response to the event signal, and distributing the new service profile so as to replace the initial service profile being set in said foreign agent (Col. 7 line 13 - Col. 8 line 19); and

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(e) a foreign server located in a second administrative domain, which forwards the initial service profile and new service profile from said home server to said foreign agent (column 3, lines 45-53, visiting PLMN).

Alperovich is silent on the details of communications with a peer terminal and does not disclose distributing and setting the retrieved service profile to both said home agent and foreign agent as an initial service profile as well as distributing the new service profile so as to replace the initial service profile being set in both said home and foreign agent. Pentikainen teaches that a service profile will be retrieved and distributed to both a home and foreign system (Col. 7 lines 62- Col. 8 line 3: group profile data, which includes class of services -col. 2 lines 14-25 - is distributed to both a home and foreign system).

Alperovich does not explicitly teach said home agent performs route optimization when a packet from the peer terminal is intercepted and tunneled to the user terminal, keeps a record about the peer terminal that has been subjected to the route optimization, and refers to the record to identify the peer terminal when a service profile change request is received from said home server. Perkins teaches route optimization for packets intercepted from a peer terminal communication to a user terminal (Top paragraph on page 7). The home agent keeps a record about the peer terminal that has been subjected to the route optimization and refers to the record to identify the peer terminal when a service profile change request is received from a home server (Page 7, 2nd and 3rd paragraphs - authentication association - node may create or update a optimization binding only after authentication. On update of the user terminal's binding,

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the source node (peer terminal) and home agent must have established a mobility security association).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the system disclosed by Alperovich and modify it as indicated by Pentikainen and Perkins such that the system further comprises service profile setting means for retrieving the service profile from said service control database when the user terminal initiates a communication session, and distributing and setting the retrieved service profile to said home agent and foreign agent as an initial service profile, the service profile variably specifying services that the user terminal requires depending on control conditions, and service profile updating means for generating an event signal when one of the control conditions described in the retrieved service profile is met, obtaining a new service profile from said service control database in response to the event signal, and distributing the new service profile so as to replace the initial service profile being set in said home agent and foreign agent; and said home agent performs route optimization when a packet from the peer terminal is intercepted and tunneled to the user terminal, keeps a record about the peer terminal that has been subjected to the route optimization, and refers to the record to identify the peer terminal when a service profile change request is received from said home server. One would be motivated to have this, as it is desirable to reliably maintain profile data (In Pentikainen: Col. 5 line 56 - Col. 6 line 9 and Col. 2 lines 35-57). Furthermore, route optimization by the home agent reduces the unnecessary burden on the network and routers (Top of Page 5 of Perkins).

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9. With respect to Claim 2, Alperovich further teaches wherein said home server generates the event signal for the update of the service profile by detecting at least one of: an event related to user authentication (In Alperovich: Col. 3, lines 45-54), an event related to authorized use of network resources (In Alperovich: Col.3, lines 45-54), and an event related to accounting functions (In Alperovich: Col. 4, lines 30-34).

10. With respect to Claim 3, Alperovich further teaches comprising a network control mechanism, which informs said home server of an event that is detected therein, while supervising and managing the network (In Alperovich: Col. 3, line 55 - column 4, line 13, Gateway Mobile Switching Center (GMSCI).

11. With respect to Claim 4, Alperovich further teaches wherein said service profile updating means in said home server obtains and distributes the new service profile in response to the event informed by said network control mechanism (In Alperovich: Col. 8, lines 42-54).

12. With respect to Claim 5, Alperovich further teaches wherein said home agent performs route optimization when a packet from the peer terminal is intercepted and tunneled to the user terminal, keeps a record about the peer terminal that has been subjected to the route optimization, and refers to the record to identify the peer terminal when a service profile change request is received from said home server (In Alperovich: Col. 4, lines 5-10).

13. With respect to Claim 6, Alperovich further teaches wherein said home server allocates said home agent when the user terminal initiates the communication session. (In Alperovich: Col. 13, lines 45-53, HLR).

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14. With respect to Claim 7, Alperovich further teaches further comprising another foreign agent located within the second administrative domain, and which sends a service profile change request message to the user terminal's previous foreign agent when the user terminal has moved and registered with said another foreign agent (In Alperovich: Col. 4, lines 13-33).

15. With respect to Claim 8, Alperovich further teaches comprising: - another foreign server which covers a third administrative domain (In Alperovich: Col. 4, lines 14- 33), and - another foreign agent which is located within the third administrative domain, - wherein said home server sends a service profile change request message to both the user terminal's previous foreign server and said another foreign server when the user terminal has moved and registered with said another foreign agent (In Alperovich: Col. 4, lines 14-33).

16. With respect to Claim 9, Alperovich further teaches wherein said foreign server allocates said home agent when the user terminal initiates the communication session (In Alperovich: Col. 5, lines 1-24).

17. With respect to Claim 10, Alperovich further teaches comprising another foreign agent which is located within the second administrative domain, and which sends a service profile change request message to the user terminal's previous foreign agent when the user terminal has moved and registered with said another foreign agent (In Alperovich: Col. 7, lines 41-67).

18. With respect to Claim 11, Alperovich further teaches comprising: another foreign server which is located in a third administrative domain (In Alperovich: Col. 4, lines 14-

33), and another foreign agent which covers another foreign network within the third administrative domain (In Alperovich: Col. 4, lines 14-33), wherein said home server sends a service profile change request message to both the user terminal's previous foreign server and said another foreign server when the user terminal has moved and registered with said another foreign agent (In Alperovich: Col. 4, lines 14-33).

19. With respect to Claim 12, Alperovich further teaches comprising: an address translation server which provides a service using predetermined address translation rules (In Alperovich: Col. 7, lines 47-56; column 8, lines 21-41), wherein said service profile updating means in said home server produces and distributes the new service profile when an event related to the address translation rules occurs during the service (In Alperovich: Col. 7, lines 47-56; column 8, lines 21-41).

20. With respect to Claim 13, Alperovich further teaches comprising conflict avoiding means for avoiding a conflict between said service profile updating means activated by the event signal detected in said home server and a person who is attempting to modify the service profile stored in said service control database (In Alperovich: Col. 8, lines 10-19).

21. As per claim 14, Alperovich further teaches wherein said conflict avoiding means deactivates the event signal in case of conflict, and after the modification of the service profile is finished, redistributes the service profile and reactivates the event signal (In Alperovich: 8, lines 10-19).

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22. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alperovich in view of "Route Optimization in Mobile IP" Internet Draft by Perkins et al. (Perkins).

23. With respect to Claim 18, Alperovich et al teach a home agent located in an administrative domain to which a user terminal belong, comprising:

- peer terminal interface means for interfacing with a peer terminal communicating with the user terminal (Col. 3, lines 30-35),.
- tunneling control means for maintaining the location of the user terminal that is visiting a foreign network, and tunneling packet for delivery to the user terminal (Col. 3, lines 45-54); and
- service profile updating means for updating a service profile variably specifying service that the user terminal requires depending on control conditions (Col. 7 line 13 - Col. 8 line 19 and note Fig. 7).

Alperovich does not explicitly teach said home agent performs route optimization when a packet from the peer terminal is intercepted and tunneled to the user terminal, keeps a record about the peer terminal that has been subjected to the route optimization, and refers to the record to identify the peer terminal when a service profile change request is received from said home server. Perkins teaches route optimization for packets intercepted from a peer terminal communication to a user terminal (Top paragraph on page 7). The home agent keeps a record about the peer terminal that has been subjected to the route optimization and refers to the record to identify the peer terminal when a service profile change request is received from a home server (Page 7,

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2nd and 3rd paragraphs - authentication association - node may create or update a optimization binding only after authentication. On update of the user terminal's binding, the source node (peer terminal) and home agent must have established a mobility security association).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the agent disclosed by Alperovich and modify it as indicated by Perkins such that it further comprises said home agent performs route optimization when a packet from the peer terminal is intercepted and tunneled to the user terminal, keeps a record about the peer terminal that has been subjected to the route optimization, and refers to the record to identify the peer terminal when a service profile change request is received from said home server. One would be motivated to have this, as route optimization by the home agent reduces the unnecessary burden on the network and routers (Top of Page 5 of Perkins).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 571-272-3986. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



David Lazaro
March 7, 2007



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